

WHAT IS CLAIMED IS:

1. A greenhouse system comprising:
a plant box for planting plants and seedlings;
a structure for embedding a water flow system proximate to the plant box;
a water distribution system for distributing water to the water flow system;
and
a system for heating or cooling water distributed by the water distribution system.
2. The greenhouse system according to claim 1, further comprising an added shade system arranged outside the greenhouse to cool air entering the greenhouse.
3. The greenhouse system according to claim 2, further comprising a structure for attaching the plant box to an overhead structure of the greenhouse.
4. The greenhouse system according to claim 3, further comprising a gutter system for collecting drainage from the plant box.
5. The greenhouse system according to claim 1, wherein the water flow system comprises tubes.
6. The greenhouse system according to claim 1, wherein the tubes are made of plastic.
7. The greenhouse system according to claim 5, wherein the structure for embedding the water flow system comprises grooves in the plant box on which the tubes are arranged.
8. The greenhouse system according to claim 1, wherein the system for heating or cooling water comprises a reversible heat pump that can heat or cool the water.

9. The greenhouse system according to claim 1, wherein the system for heating or cooling water comprises a boiler that can heat the water.

10. The greenhouse system according to claim 3, wherein the structure for attaching the plant box comprises steel cables that attach to a gutter on which the plant box is arranged, and wherein a motor and gearbox unit raises and lowers the steel cables to thereby raise and lower the gutter and the plant box.

11. The greenhouse system according to claim 4, wherein the gutter system includes a gutter channel for supporting the plant box and wherein a lower surface of the gutter channel comprises a V shaped section.

12. The greenhouse system according to claim 1, wherein the structure for providing the water flow system comprises tubes arranged between the plant box and the gutter.

13. The greenhouse system according to claim 10, wherein the motor and gearbox unit comprises two motor and gearbox units with a first motor and gearbox unit connected to one set of first plant boxes and a second motor and gearbox unit connected to another set of second plant boxes, wherein the first plant boxes are arranged alternately with the second plant boxes in a row plant boxes.

14. A method of growing plants and seedlings in a greenhouse, comprising:
providing a plant box for planting plants and seedlings;
providing a water flow system proximate to the plant box;
distributing water to the water flow system proximate to the plant box; and
heating or cooling the water in the water flow system to control a soil temperature in the plant box.

15. The method according to claim 14, further comprising:
attaching the plant box to an overhead structure of the greenhouse; and
raising or lowering the plant box to access or work on the plant box.

16. The method according to claim 14, further comprising providing a
gutter system for collecting drainage from the plant box.

17. The method according to claim 14, further comprising providing
grooves in the plant box, and
arranging tubes in the plant box, wherein the tubes are part of the water
flow system.

18. The method according to claim 17, further comprising heating or
cooling the water in the water flow system in order to provide a desired soil
temperature in the plant box.

19. A plant box for a greenhouse comprising:
a bottom surface and a side wall structure; and
at least one groove in the bottom surface designed for arranging a water
flow tube therein.

20. The plant box according to claim 19, further comprising at least one
drain hole in the bottom surface for providing drainage from the plant box to a
gutter system.

21. A plant grown using the method according to claim 14.

22. The plant according to claim 21, wherein the plant comprises a
strawberry plant.